SENATE RESOLUTION

REQUESTING THE DEPARTMENT OF LAND AND NATURAL RESOURCES AND THE OFFICE OF PLANNING, IN CONSULTATION WITH THE HAWAII CLIMATE CHANGE MITIGATION AND ADAPTATION COMMISSION, ACTING THROUGH ITS COORDINATOR, TO COLLABORATE TO CONVENE A TASK FORCE ON WAIKIKI'S ADAPTATION TO SEA LEVEL RISE.

WHEREAS, substantial flooding impacts from sea level rise are projected as a result of climate change for the island of Oahu, with lesser impacts for other parts of the State, as discussed in more detail below; and

WHEREAS, the iconic tourist destination of Waikiki, in particular, is projected to incur among the worst impacts in the State, including a much higher economic impact in lost property value than any other area due to the dense concentration of high level investment in hotels, condominiums, and retail establishments there; and

WHEREAS, rising sea levels are among the significant adverse impacts of climate change, which result from the expanded volume of ocean waters due to increased water temperatures as the oceans absorb most of the increased heat from global warming and the addition of melt waters from melting glaciers and ice sheets in the polar regions; and

WHEREAS, another effect of the increasing temperature of ocean waters is to add energy to tropical storms such as hurricanes, such that such storms become more powerful and last longer with damaging force; and

WHEREAS, these impacts have been recognized by the Legislature since at least 2007, when in enacting Act 234, Session Laws of Hawaii 2007, it observed that "climate change poses a serious threat to the economic well-being, public health, natural resources, and the environment of Hawaii" and that "the potential adverse effects of global warming include a rise in sea levels resulting in the displacement of businesses and residences...and an increase in the severity of storms and extreme weather events"; and
WHEREAS, Hawaii, as the only state in the country consisting solely of islands, is particularly vulnerable to rising sea levels and more powerful tropical storms; and

WHEREAS, Hawaii's Sea Level Rise Vulnerability and Adaptation Report dated December 2017 (the "Sea Level Rise Report") is the first state-wide vulnerability assessment for coastal hazards associated with sea level rise in Hawaii; and

WHEREAS, preparation of the Sea Level Rise Report was initially mandated by Act 83, Session Laws of Hawaii 2014, and expanded in scope pursuant to Act 32, Session Laws of Hawaii 2017; and

WHEREAS, the Sea Level Rise Report, including its projections of sea level exposure areas described below, has been officially approved by the Hawaii Climate Change Mitigation and Adaptation Commission; and

WHEREAS, among the scientific information included in the Sea Level Rise Report are projections of future increases in global sea level of up to 3.2 feet by 2100 under the "business as usual" scenario developed by the United Nations Intergovernmental Panel on Climate Change in its Assessment Report 5 (IPCC 2014) in which greenhouse gas emissions continue to increase at current rates; and

WHEREAS, however, the Sea Level Rise Report further notes that "[more] recent observations and projections suggest that this magnitude of seal level rise could occur as early as year 2060", leading to the Sea Level Rise Report's conclusion that, "...it is vital that the magnitude and rate of sea level rise is tracked as new projections emerge, [to] plan for 3.2 feet of sea level rise now, and be ready to adjust that projection upward"; and

WHEREAS, the Sea Level Rise Report also cites emerging science, including a Climate Science Special Report (CSSR) issued in 2017 by the U.S. Global Change Research Program and a report by the National Oceanic and Atmospheric Administration, indicating that the global mean sea level is very likely to rise...
by up to 4.3 feet by 2100 if greenhouse gas emissions continue
to increase and suggesting that, for high emission scenarios, a
global mean sea level rise in the range of 6.4 feet to 8.8 feet
is "physically plausible" by 2100, based on observations and
models of potential rapid ice melt in Greenland and Antarctica;
and

WHEREAS, the National Oceanic and Atmospheric
Administration report further indicates that sea level rise in
the area around Hawaii and other tropical areas will exceed
projections of global mean sea level rise; and

WHEREAS, the Sea Level Rise Report states that the
potential future exposure of each of the Hawaiian islands to
coastal hazards as a result of sea level rise were determined by
computer modeling, "using the best available data and methods",
to assess three separate chronic flooding hazards, including
passive flooding, annual high wave flooding, and coastal
erosion; and

WHEREAS, the separate impacts of these three hazards were
mathematically combined by the model to define the total
projected extent of chronic flooding due to sea level rise under
four scenarios, including a maximum rise of 3.2 feet; and

WHEREAS, the total projected area of flooding impact is
referred to as the "sea level rise exposure area"; and

WHEREAS, the results of the modeling are available for
online review through an interactive tool referred to as the
Hawaii Sea Level Rise Viewer; and

WHEREAS, in addition to sea level rise projections, the Sea
Level Rise Report also provides vulnerability assessments of the
estimated social, cultural, economic, and environmental impacts
of the projected sea level rise; and

WHEREAS, vulnerability, as used in the Sea Level Rise
Report, refers to the "degree to which a system is susceptible
to, and unable to cope with, adverse effects of climate change,
including climate variability and extremes"; and
WHEREAS, for lands within the sea level rise exposure area, vulnerability was assessed as "the estimated potential permanent loss of land and structures and displaced people from the exposure to sea level rise"; and

WHEREAS, potential economic loss, as determined in the Sea Level Rise Report, is "based on the value of the land and structures from the county tax parcel database permanently lost in the sea level rise exposure area for each projected height of sea level rise"; and

WHEREAS, the Sea Level Rise Report's modeling projects much greater impact from chronic flooding to the island of Oahu (nine thousand four hundred acres) than the other islands of Hawaii (Kauai having the next largest flooding acreage of 5,760 acres); and

WHEREAS, when these impacts are translated to vulnerability assessments, the Sea Level Rise Report shows the island of Oahu to have a markedly higher vulnerability to sea level rise impacts than other islands of the State; and

WHEREAS, Oahu's projected thirteen thousand three hundred displaced persons is more than twice the total for all other islands of the State and its projected $12,900,000,000 in economic loss from the chronic flooding of structures and land is nearly twice the total for all other islands of the State; and

WHEREAS, the Waikiki area of Oahu is described by the Sea Level Rise Report as particularly vulnerable to sea level rise due to very low elevation of this area; and

WHEREAS, also problematic is the presence of the Ala Wai Canal, which will act as a conduit for ocean waters into the interior of Waikiki as sea level rise worsens; and

WHEREAS, this iconic tourist attraction has the highest concentration and largest total value of projected economic loss (estimated at over $5,000,000,000) of any area on Oahu or elsewhere in the State, including twelve major hotels as well as
many condominiums and expensive retail shopping establishments; and

WHEREAS, Waikiki is also projected to have the single largest concentration of displaced residents; and

WHEREAS, the Sea Level Rise Report includes recommendations for the development of policies and programs to support, sustainable and resilient land use and community development, prioritization of smart urban redevelopment outside the projected sea level rise exposure area, development of innovative and sustainable financing approaches to support adaptation, and promotion of intergovernmental collaboration and accountability for adaptation measures; and

WHEREAS, the Sea Level Rise Report warns that decisions about where to use coastal armoring and when to retreat will need to be made carefully; and

WHEREAS, the Sea Level Rise Report carefully points out that it does not include a plan for implementation of its recommendations; now, therefore,

BE IT RESOLVED by the Senate of the Thirtieth Legislature of the State of Hawaii, Regular Session of 2020, that the Department of Land and Natural Resources and the Office of Planning, in consultation with the Hawaii Climate Change Mitigation and Adaptation Commission, acting through its Coordinator, are requested to collaborate to convene a task force on Waikiki's adaptation to sea level rise to do the following:

(1) After reviewing the recommendations from the Sea Level Rise Report, develop, consider, and offer recommendations on a broad range of alternative options for adaptive measures by which Waikiki might respond to projected increasing sea levels, including but not limited to the extent to whether Waikiki should retreat from the incursions of ocean waters or, conversely, protective measures should be considered, if deemed technically feasible, to preserve Waikiki in its current state;
Consider and offer recommendations on potential methods of funding of such adaptive measures for Waikiki from public and private stakeholders; and

To the extent that the Task Force concludes that a more detailed and in-depth engineering study concerning possible adaptation measures for Waikiki and a more in-depth financial analysis of funding options is needed for sound decision making on this monumental subject, the task force is requested to outline with as much specificity as reasonable the topics or issues to be addressed in such follow-up study or studies and an estimate of the costs thereof; and

BE IT FURTHER RESOLVED that the Chairperson of the Board of Land and Natural Resources, or the Chairperson's designee, and the Director of the Office of Planning, or the Director's designee, are requested to serve as co-chairs of the task force and to invite one representative of each of the following entities to service as members of the task force:

(1) The Office of Conservation and Coastal Lands of the Department of Land and Natural Resources;

(2) The Department of Business, Economic Development and Tourism;

(3) The Office of the Mayor of the City and County of Honolulu;

(4) The Office of Climate Change, Sustainability, and Resilience of the City and County of Honolulu;

(5) The Department of Planning of the City and County of Honolulu;

(6) The Hawaii Tourism Authority;

(7) The Chamber of Commerce Hawaii;
(8) The Waikiki Beach Special Improvement District Association;

(9) The Waikiki Improvement Association; and

(10) The Waikiki Neighborhood Board; and

BE IT FURTHER RESOLVED that the Chairperson of the Board of Land and Natural Resources, or the Chairperson's designee, and the Director of the Office of Planning, or the Director's designee, are requested to consider inviting representatives from the following entities to serve as additional non-voting participants in the task force:

(1) A civil engineering firm;

(2) A bank or financing firm; and

(3) Two representatives at large from the Waikiki community; and

BE IT FURTHER RESOLVED that the task force is requested to submit a report with its findings and recommendations, including any proposed legislation, to the Legislature no later than twenty days prior to the convening of the Regular Session of 2021; and

BE IT FURTHER RESOLVED that the members of the task force shall serve without compensation; and

BE IT FURTHER RESOLVED that certified copies of this Resolution be transmitted to Chairperson of the Board of Land and Natural Resources; Director of Business, Economic Development, and Tourism; Director of the Office of Planning; Chairperson of the Hawaii Climate Change Mitigation and Adaptation Commission; Director of the Office of Climate Change, Sustainability, and Resilience; Director of the Department of Planning of the City and County of Honolulu; Mayor of the City and County of Honolulu; Chairperson of the Board of Directors of the Hawaii Tourism Authority; Chairperson of the Chamber of Commerce Hawaii; Chairperson of the Waikiki Beach Special Improvement District Association; Chairperson of the Waikiki
Improvement Association; and Chairperson of the Waikiki Neighborhood Board.

OFFERED BY:

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